



DAD 220 Project One – Anita Ford

Step One: Create a Database

1. In your online IDE (Codio), **create a database schema** called QuantigrationUpdates that will hold tables by using SQL commands.
 - a. List out the database name on the screen.
 - b. Provide the SQL commands you ran against MySQL to complete this step.

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DAD-220 SQL Lab E...

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  FleetMaintenanceRecords.cs
  FORD
  HRandIS-Employees.csv
  mysqlsampledatabase.sql
  mysqlsampledatabase.zip
  orders.csv
  qрма-orders-data.csv
  README.md
  rma.csv

Terminal x
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 6.2.0-1017-aws x86_64)

* Documentation: https://help.ubuntu.com
* Management:   https://landscape.canonical.com
* Support:      https://ubuntu.com/advantage
*
* Welcome to the Codio Terminal!
*
* https://docs.codio.com/develop/develop/ide/boxes/overview
*
* Your Codio Box domain is: bordercitizen-stamplastic.codio.io
*
Last login: Wed Apr 10 15:10:02 2024 from 192.168.10.226
codio@bordercitizen-stamplastic:~/workspace$ .guides/content/startup.sh
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 7
Server version: 8.0.31-0ubuntu0.22.04.1 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE QuantigrationUpdates;
Query OK, 1 row affected (0.09 sec)

mysql>
```

2. Connect to the QuantigrationUpdates schema. Using the ERD as a reference, **write SQL commands to create** the following **tables** with the appropriate attributes and keys to demonstrate relationships based on the ERD.
 - a. A table named Customers to store customer information with a primary key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.

```
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Terminal x
Last login: Wed Apr 10 15:10:02 2024 from 192.168.10.226
codio@bordercitizen-stamplastic:~/workspace$ .guides/content/startup.sh
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 7
Server version: 8.0.31-0ubuntu0.22.04.1 (Ubuntu)

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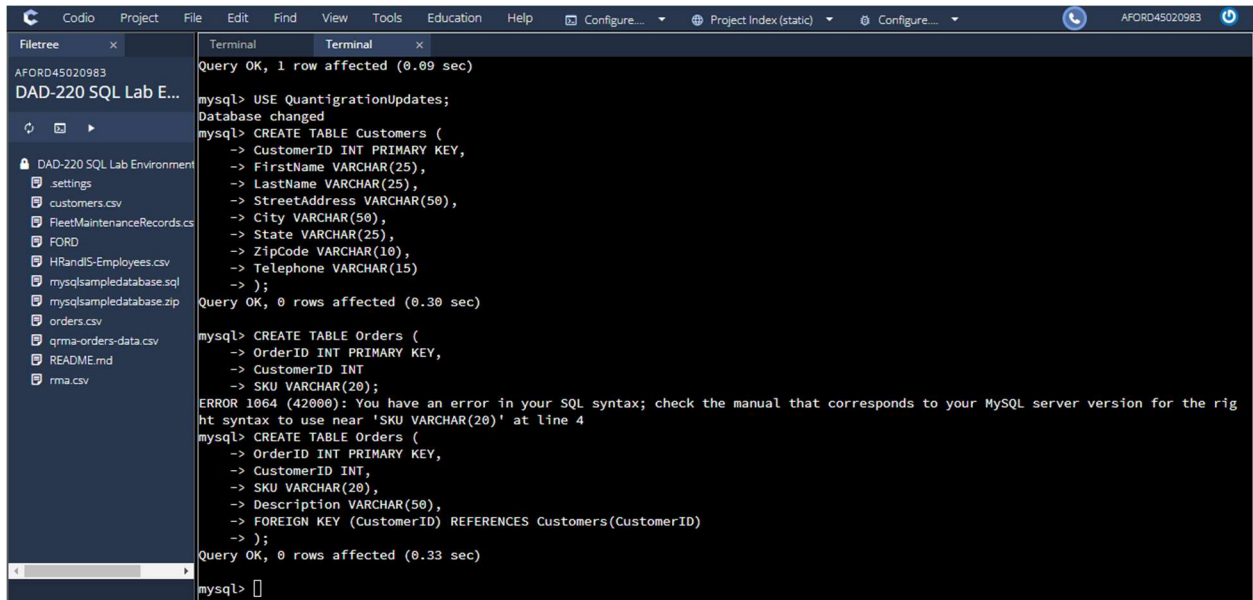
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE QuantigrationUpdates;
Query OK, 1 row affected (0.09 sec)

mysql> USE QuantigrationUpdates;
Database changed
mysql> CREATE TABLE Customers (
  -> CustomerID INT PRIMARY KEY,
  -> FirstName VARCHAR(25),
  -> LastName VARCHAR(25),
  -> StreetAddress VARCHAR(50),
  -> City VARCHAR(50),
  -> State VARCHAR(25),
  -> ZipCode VARCHAR(10),
  -> Telephone VARCHAR(15)
  -> );
Query OK, 0 rows affected (0.30 sec)

mysql>
```

- b. A table named Orders to store order information with a primary key of Order ID and a foreign key of Customer ID. Provide the SQL commands you ran against MySQL to complete this step.



```

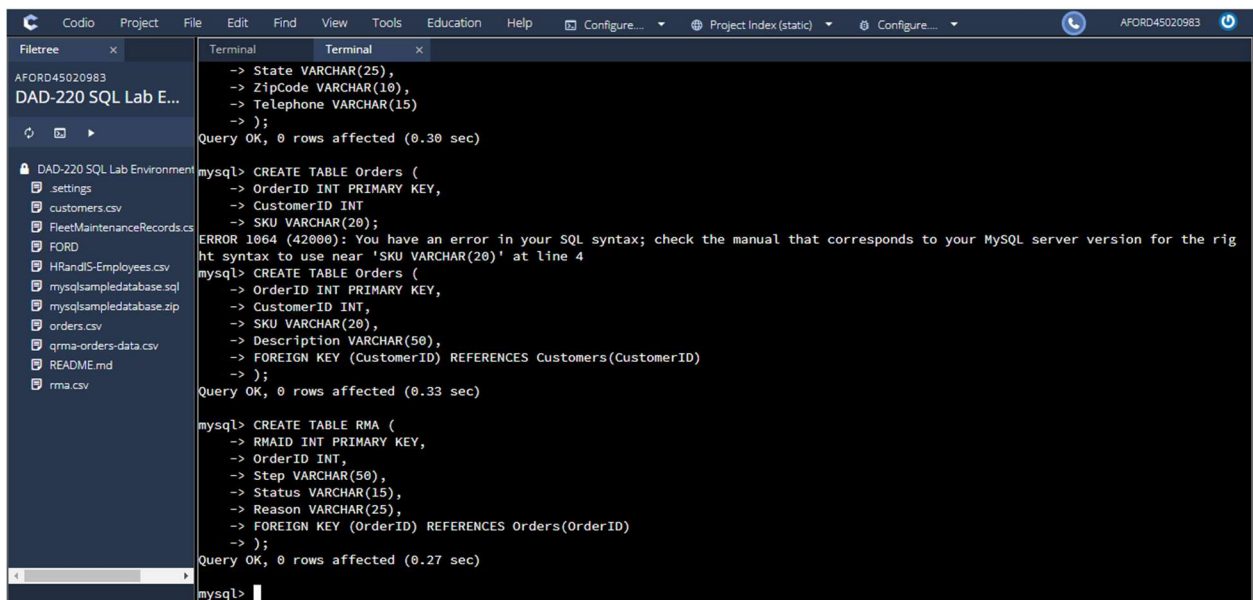
mysql> USE QuantigrationUpdates;
Database changed
mysql> CREATE TABLE Customers (
  -> CustomerID INT PRIMARY KEY,
  -> FirstName VARCHAR(25),
  -> LastName VARCHAR(25),
  -> StreetAddress VARCHAR(50),
  -> City VARCHAR(50),
  -> State VARCHAR(25),
  -> ZipCode VARCHAR(10),
  -> Telephone VARCHAR(15)
  -> );
Query OK, 0 rows affected (0.30 sec)

mysql> CREATE TABLE Orders (
  -> OrderID INT PRIMARY KEY,
  -> CustomerID INT
  -> SKU VARCHAR(20);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'SKU VARCHAR(20)' at line 4
mysql> CREATE TABLE Orders (
  -> OrderID INT PRIMARY KEY,
  -> CustomerID INT,
  -> SKU VARCHAR(20),
  -> Description VARCHAR(50),
  -> FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)
  -> );
Query OK, 0 rows affected (0.33 sec)

mysql>

```

- c. A table named RMA to store RMA information with a primary key of RMA ID and a foreign key of Order ID. Provide the SQL commands you ran against MySQL to complete this step.



```

mysql> CREATE TABLE Orders (
  -> OrderID INT PRIMARY KEY,
  -> CustomerID INT
  -> SKU VARCHAR(20);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'SKU VARCHAR(20)' at line 4
mysql> CREATE TABLE Orders (
  -> OrderID INT PRIMARY KEY,
  -> CustomerID INT,
  -> SKU VARCHAR(20),
  -> Description VARCHAR(50),
  -> FOREIGN KEY (CustomerID) REFERENCES Customers(CustomerID)
  -> );
Query OK, 0 rows affected (0.33 sec)

mysql> CREATE TABLE RMA (
  -> RMAID INT PRIMARY KEY,
  -> OrderID INT,
  -> Step VARCHAR(50),
  -> Status VARCHAR(15),
  -> Reason VARCHAR(25),
  -> FOREIGN KEY (OrderID) REFERENCES Orders(OrderID)
  -> );
Query OK, 0 rows affected (0.27 sec)

mysql>

```



Step Two: Load and Query the Data

1. Import the data from each file into tables.

- Use the QuantigrationUpdates database, the three tables you created, and the three CSV files preloaded into Codio.
- Use the import utility of your database program to load the data from each file into the table of the same name. Perform this step three times, once for each table.
- Provide the SQL commands you ran against MySQL to complete this step.

```
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affiliates. Other names may be trademarks of their respective  
owners.  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
mysql> USE QuantigrationUpdates;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
mysql> SHOW TABLES;  
+-----+  
| Tables_in_QuantigrationUpdates |  
+-----+  
| Customers                       |  
| Orders                         |  
| RMA                            |  
+-----+  
3 rows in set (0.08 sec)  
  
mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE Customers FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FIELDS TERMINATED BY ',' LINES TERMINATED BY  
'\r\n'' at line 1  
mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE customers  
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';  
ERROR 1146 (42500): Table 'QuantigrationUpdates.customers' doesn't exist  
mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE Customers  
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';  
Query OK, 37994 rows affected (2.82 sec)  
Records: 37994 Deleted: 0 Skipped: 0 Warnings: 0  
  
mysql> LOAD DATA INFILE '/home/codio/workspace/orders.csv' INTO TABLE Orders  
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';  
Query OK, 37994 rows affected (3.19 sec)  
Records: 37994 Deleted: 0 Skipped: 0 Warnings: 0  
  
mysql> LOAD DATA INFILE '/home/codio/workspace/rma.csv' INTO TABLE RMA  
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';  
Query OK, 38162 rows affected (3.75 sec)  
Records: 38162 Deleted: 0 Skipped: 0 Warnings: 0  
  
mysql>
```



2. **Write basic queries** against the imported tables to organize and analyze the targeted data. For each query, replace the bracketed text with a screenshot of the query and its output. Also, include a one- to three-sentence description of the output.

- a. Write a SQL query that returns the count of orders for customers located only in Framingham, Massachusetts.
 - i. This query will use a table join between the Customers and Orders tables. The query will also use a WHERE clause.
 - ii. How many records were returned? 505 records were returned.

```
mysql> USE QuantigrationUpdates;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> SHOW TABLES;
+-----+
| Tables_in_QuantigrationUpdates |
+-----+
| Customers                       |
| Orders                         |
| RMA                             |
+-----+
3 rows in set (0.00 sec)

mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE Customers FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FIELDS TERMINATED BY ',' LINES TERMINATED B
Y '\r\n' at line 1
mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE customers
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';
ERROR 1146 (42000): Table 'QuantigrationUpdates.customers' doesn't exist
mysql> LOAD DATA INFILE '/home/codio/workspace/customers.csv' INTO TABLE Customers
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';
Query OK, 37994 rows affected (2.82 sec)
Records: 37994 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE '/home/codio/workspace/orders.csv' INTO TABLE Orders
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';
Query OK, 37994 rows affected (3.19 sec)
Records: 37994 Deleted: 0 Skipped: 0 Warnings: 0

mysql> LOAD DATA INFILE '/home/codio/workspace/rma.csv' INTO TABLE RMA
-> FIELDS TERMINATED BY ',' LINES TERMINATED BY '\r\n';
Query OK, 38162 rows affected (3.75 sec)
Records: 38162 Deleted: 0 Skipped: 0 Warnings: 0

mysql> SELECT COUNT(*) AS OrderCount
-> FROM Orders
-> JOIN Customers ON Orders.CustomerID = Customers.CustomerID
-> WHERE Customers.City = 'Framingham' AND Customers.State = 'Massachusetts';
+-----+
| OrderCount |
+-----+
|          505 |
+-----+
1 row in set (0.02 sec)

mysql>
```



- b. Write a SQL query to select all of the customers located in Massachusetts.
- Use a WHERE clause to limit the number of records in the Customers table to only those who are located in Massachusetts.
SELECT * FROM Customers WHERE State = 'Massachusetts'
 - How many records were returned? 982 records were returned.

The screenshot shows a SQL IDE interface with a table of customer records. The table has 10 columns: ID, Name, Address, City, State, Zip, and Phone. The records are filtered by the state 'Massachusetts'. The status bar at the bottom indicates '982 rows in set (0.03 sec)'.

ID	Name	Address	City	State	Zip	Phone
98312	Faith	Mc Connell	796 Old Boulevard	Framingham	Massachusetts	1701 160-750-3460
98325	Roderick	Mitchell	240 White Old Boulevard	Little Rock	Massachusetts	4129 163-3498603
98327	Wendell	Levy	773 First Boulevard	New Orleans	Massachusetts	92688 923-897-6239
98352	Chanda	Lambert	723 Nobel Blvd.	Virginia Beach	Massachusetts	62388 309-923-6134
98355	Lashonda	Holland	820 Green New Road	Framingham	Massachusetts	1701 2225971376
98369	Marsha	Blair	897 Fabien Avenue	Framingham	Massachusetts	1701 6293237876
98449	Karl	Lam	58 Green Milton Way	Milwaukee	Massachusetts	31329 1405763801
98492	Blanca	Hayes	554 East Milton Blvd.	Long Beach	Massachusetts	35322 647-976-1546
98493	Brandon	O'Connor	909 New St.	Framingham	Massachusetts	1701 603-753-7938
98546	Daphne	Haas	39 South Clarendon Drive	Nashville	Massachusetts	26656 357871-6216
98615	Vicky	Diaz	07 Hague Avenue	Framingham	Massachusetts	1701 437-1928857
98635	Denise	Dalton	179 Clarendon St.	Framingham	Massachusetts	1701 767-321-6807
98687	Tracey	Dixon	990 White Clarendon Freeway	Framingham	Massachusetts	1701 937-739-5312
98700	Roger	Noble	21 West Rocky Hague Boulevard	Mesa	Massachusetts	5366 173281506
98745	Bryant	Gibbs	823 East Cowley St.	Framingham	Massachusetts	1701 1360132105
98757	Lorie	Cantu	59 South Second Street	Boston	Massachusetts	70201 949902062
98798	Troy	Rich	17 Nobel Avenue	Framingham	Massachusetts	1701 276384-3669
98813	Teddy	Hubbard	769 Fabien Street	Framingham	Massachusetts	1701 569146-9193
98840	Angel	Fitzgerald	265 Rocky Cowley Avenue	Framingham	Massachusetts	1701 598-4026537
98872	Steve	Zimmerman	83 New Street	Framingham	Massachusetts	1701 5364717049
98899	Brandie	Strickland	38 West Old Way	Richmond	Massachusetts	68814 336-523-9662
99013	Helen	Cox	169 Milton Avenue	Oklahoma	Massachusetts	88825 388694-7248
99015	Toni	Liu	699 Hague Way	Framingham	Massachusetts	1701 278-147-5615
99024	Sasana	Coffey	42 Old Road	Framingham	Massachusetts	1701 565600105
99042	Danlon	Dodson	38 White Old Boulevard	Dayton	Massachusetts	29616 489-574-8892
99053	Robbie	Coolley	878 White Oak Way	Framingham	Massachusetts	1701 893-8764146
99055	Trisha	Rosenzie	38 East Nobel Avenue	Honolulu	Massachusetts	39274 817-2707256
99095	Angela	Cisneros	780 Second Boulevard	Dayton	Massachusetts	29835 864-369-0949
99112	Donald	Griffin	177 East Rocky Clarendon Blvd.	Framingham	Massachusetts	1701 786747-9328
99161	Jesse	Henry	82 Rocky Oak Avenue	Long Beach	Massachusetts	17707 615-968-2926
99300	Adrian	Bradshaw	35 Rocky Fabien Street	Santa Ana	Massachusetts	25380 957-460-9588
99386	Rusty	Wood	83 White Hague Parkway	Freemont	Massachusetts	53929 405-6882927
99412	Samantha	Parrish	731 East Fabien Boulevard	Madison	Massachusetts	84480 2832707401
99426	Tanisha	Gordon	39 Fabien Street	Framingham	Massachusetts	1701 996372-8607
99438	Christina	Kirk	253 North Rocky New Road	Des Moines	Massachusetts	35316 988-758-6026
99439	Felix	Fuller	75 Milton Freeway	Framingham	Massachusetts	1701 157-196-4835
99442	Shelly	Flores	543 Hague Road	Bakersfield	Massachusetts	3508 542-7107739
99478	Trisha	Cherry	36 Green Milton Boulevard	Framingham	Massachusetts	1701 6246514973
99559	Dean	Ballard	19 South Old Avenue	Baltimore	Massachusetts	46145 835467-1433
99571	Jeremiah	Rodgers	91 North Hague Street	Detroit	Massachusetts	99752 752-019-8914
99616	Angelina	Trujillo	98 Rocky Cowley Way	Shreveport	Massachusetts	37291 331-229-4312
99676	Ginger	Hodge	28 Rocky Nobel Way	Framingham	Massachusetts	1701 212-120-1832
99690	Darius	Harris	234 Cowley Road	Framingham	Massachusetts	1701 676-4431359
99896	Nicole	Berg	31 East Second Drive	Framingham	Massachusetts	1701 8374554959
99942	Mandi	Lam	59 Fabien Road	Wichita	Massachusetts	47379 379884-7041



- c. Write a SQL query to insert four new records into the Orders and Customers tables using the data below:

Customers Table

CustomerID	FirstName	LastName	StreetAddress	City	State	ZipCode	Telephone
100004	Luke	Skywalker	15 Maiden Lane	New York	NY	10222	212-555-1234
100005	Winston	Smith	123 Sycamore Street	Greensboro	NC	27401	919-555-6623
100006	MaryAnne	Jenkins	1 Coconut Way	Jupiter	FL	33458	321-555-8907
100007	Janet	Williams	55 Redondo Beach Blvd	Torrance	CA	90501	310-555-5678

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Terminal x
98546 Daphne Haas 39 South Clarendon Drive Nashville Massachusetts 26656 357871-6216
98615 Vicky Diaz 67 Hague Avenue Framingham Massachusetts 1701 437-1928857
98635 Denise Dalton 179 Clarendon St. Framingham Massachusetts 1701 787-231-8897
98687 Tracey Dixon 990 White Clarendon Freeway Framingham Massachusetts 1701 937-739-5312
98780 Roger Noble 21 West Rocky Hague Boulevard Mesa Massachusetts 5366 173281596
98745 Bryant Gibbs 823 East Cowley St. Framingham Massachusetts 1701 1366132105
98757 Lorie Cantu 59 South Second Street Boston Massachusetts 02021 9849902462
98798 Troy Rich 17 Nobel Avenue Framingham Massachusetts 1701 276384-3669
98813 Teddy Hubbard 769 Fabien Street Framingham Massachusetts 1701 569146-9193
98840 Angel Fitzgerald 265 Rocky Cowley Avenue Framingham Massachusetts 1701 590-402537
98873 Steve Zimmerman 83 New Street Framingham Massachusetts 1701 5304717440
98899 Brandie Strickland 38 West Old Way Richmond Massachusetts 06814 330-523-9662
99013 Helen Cox 169 Milton Avenue Oklahoma Massachusetts 88825 306094-7248
99015 Toni Liu 699 Hague Way Framingham Massachusetts 1701 270-147-5615
99024 Susana Coffey 42 Old Road Framingham Massachusetts 1701 565600195
99042 Danton Dodson 38 White Old Boulevard Dayton Massachusetts 29616 489-574-8892
99053 Robbie Cooley 878 White Oak Way Framingham Massachusetts 1701 893-8764146
99055 Trisha McKenzie 38 East Nobel Avenue Honolulu Massachusetts 30274 817-2707256
99095 Angela Cisneros 780 Second Boulevard Dayton Massachusetts 26835 884-589-8949
99112 Donald Griffin 177 East Rocky Clarendon Blvd. Framingham Massachusetts 1701 786747-9328
99161 Jesse Henry 82 Rocky Oak Avenue Long Beach Massachusetts 17787 615-968-2926
99390 Adrian Bradshaw 55 Rocky Fabien Street Santa Ana Massachusetts 32380 957-468-9588
99398 Rusty Wood 83 White Hague Parkway Fremont Massachusetts 03099 405-6802297
99412 Samantha Parrish 731 East Fabien Boulevard Madison Massachusetts 84480 2032707461
99426 Tanisha Gordon 39 Fabien Street Framingham Massachusetts 1701 996372-8607
99436 Christina Kirk 253 North Rocky New Road Des Moines Massachusetts 55316 988-758-0026
99439 Felix Fuller 75 Milton Freeway Framingham Massachusetts 1701 157-196-4035
99442 Shelly Flores 543 Hague Road Bakersfield Massachusetts 3588 542-7107739
99478 Trisha Cherry 36 Green Milton Boulevard Framingham Massachusetts 1701 6246514973
99509 Dean Ballard 19 South Old Avenue Baltimore Massachusetts 46145 835487-1433
99571 Jeremiah Rodgers 91 North Hague Street Detroit Massachusetts 90752 752-419-4914
99616 Angelina Trujillo 98 Rocky Cowley Way Shreveport Massachusetts 37291 331-229-4312
99676 Ginger Hodge 28 Rocky Nobel Way Framingham Massachusetts 1701 212-120-1832
99698 Darius Harris 234 Cowley Road Framingham Massachusetts 1701 676-4451359
99896 Nicole Berg 31 East Second Drive Framingham Massachusetts 1701 8374554959
99942 Mandi Lam 59 Fabien Road Wichita Massachusetts 47379 379884-7841

982 rows in set (0.03 sec)

mysql> INSERT INTO Customers (CustomerID, FirstName, LastName, StreetAddress, City, State, ZipCode, Telephone)
-> VALUES
-> (100004, 'Luke', 'Skywalker', '15 Maiden Lane', 'New York', 'NY', '10222', '212-555-1234'),
-> (100005, 'Winston', 'Smith', '123 Sycamore Street', 'Greensboro', 'NC', '27401', '919-555-6623'),
-> (100006, 'MaryAnne', 'Jenkins', '1 Coconut Way', 'Jupiter', 'FL', '33458', '321-555-8907'),
-> (100007, 'Janet', 'Williams', '55 Redondo Beach Blvd', 'Torrance', 'CA', '90501', '310-555-5678');
Query OK, 4 rows affected (0.12 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql>
```



Orders Table

OrderID	CustomerID	SKU	Description
1204305	100004	ADV-24-10C	Advanced Switch 10GigE Copper 24 port
1204306	100005	ADV-48-10F	Advanced Switch 10 GigE Copper/Fiber 44 port copper 4 port fiber
1204307	100006	ENT-24-10F	Enterprise Switch 10GigE SFP+ 24 Port
1204308	100007	ENT-48-10F	Enterprise Switch 10GigE SFP+ 48 port

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  orders.csv
  qma-orders-data.csv
  README.md
  rma.csv

Terminal x
98840 | Angel | Fitzgerald | 265 Rocky Cowley Avenue | Framingham | Massachusetts | 1701 | 598-4826537 |
98873 | Steve | Zimmerman | 83 New Street | Framingham | Massachusetts | 1701 | 5364717048 |
98899 | Brandie | Strickland | 38 West Old Way | Richmond | Massachusetts | 68814 | 336-323-9662 |
99013 | Helen | Cox | 169 Milton Avenue | Oklahoma | Massachusetts | 88825 | 388694-7248 |
99015 | Toni | Liu | 699 Hague Way | Framingham | Massachusetts | 1701 | 278-147-5615 |
99024 | Susana | Coffey | 42 Old Road | Framingham | Massachusetts | 1701 | 565680199 |
99042 | Dawn | Dodson | 38 White Old Boulevard | Dayton | Massachusetts | 29616 | 489-374-8892 |
99053 | Robbie | Cooley | 878 White Oak Way | Framingham | Massachusetts | 1701 | 893-8764146 |
99055 | Trisha | McKenzie | 38 East Nobel Avenue | Honolulu | Massachusetts | 39274 | 617-2707256 |
99095 | Angela | Cisneros | 780 Second Boulevard | Dayton | Massachusetts | 26835 | 884-589-8849 |
99112 | Donald | Griffin | 177 East Rocky Clarendon Blvd. | Framingham | Massachusetts | 1701 | 760747-9326 |
99161 | Jesse | Henry | 82 Rocky Oak Avenue | Long Beach | Massachusetts | 17787 | 615-968-2926 |
99390 | Adrian | Bradshaw | 55 Rocky Fabien Street | Santa Ana | Massachusetts | 35380 | 957-468-9588 |
99398 | Rusty | Wood | 83 White Hague Parkway | Fremont | Massachusetts | 53829 | 485-6806297 |
99412 | Samantha | Parrish | 731 East Fabien Boulevard | Madison | Massachusetts | 64488 | 2632767461 |
99426 | Tanisha | Gordon | 39 Fabien Street | Framingham | Massachusetts | 1701 | 996372-8607 |
99430 | Christina | Kirk | 253 North Rocky New Road | Des Moines | Massachusetts | 55316 | 988-758-8026 |
99439 | Felix | Fuller | 75 Milton Freeway | Framingham | Massachusetts | 1701 | 157-196-4835 |
99442 | Shelly | Flores | 543 Hague Road | Bakersfield | Massachusetts | 3588 | 542-7197739 |
99478 | Trisha | Cherry | 36 Green Milton Boulevard | Framingham | Massachusetts | 1701 | 6246514973 |
99559 | Dean | Ballard | 19 South Old Avenue | Baltimore | Massachusetts | 46145 | 835467-1433 |
99571 | Jeremiah | Rodgers | 91 North Hague Street | Detroit | Massachusetts | 99752 | 752-619-6014 |
99616 | Angelina | Trujillo | 98 Rocky Cowley Way | Shreveport | Massachusetts | 37291 | 331-229-4312 |
99676 | Ginger | Hodge | 28 Rocky Nobel Way | Framingham | Massachusetts | 1701 | 212-120-1832 |
99690 | Darius | Harris | 234 Cowley Road | Framingham | Massachusetts | 1701 | 676-4451359 |
99896 | Nicole | Berg | 31 East Second Drive | Framingham | Massachusetts | 1701 | 8374554850 |
99942 | Mandi | Lam | 59 Fabien Road | Wichita | Massachusetts | 47379 | 379884-7841 |

982 rows in set (0.03 sec)

mysql> INSERT INTO Customers (CustomerID, FirstName, LastName, StreetAddress, City, State, ZipCode, Telephone)
-> VALUES
-> (100004, 'Luke', 'Skywalker', '15 Maiden Lane', 'New York', 'NY', '10222', '212-555-1234'),
-> (100005, 'Winston', 'Smith', '123 Sycamore Street', 'Greensboro', 'NC', '27401', '919-555-6623'),
-> (100006, 'MaryAnne', 'Jenkins', '1 Coconut Way', 'Jupiter', 'FL', '33458', '321-555-8907'),
-> (100007, 'Janet', 'Williams', '55 Redondo Beach Blvd', 'Torrance', 'CA', '90501', '310-555-5678');
Query OK, 4 rows affected (0.12 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> INSERT INTO Orders (OrderID, CustomerID, SKU, Description)
-> VALUES
-> (1204305, 100004, 'ADV-24-10C', 'Advanced Switch 10GigE Copper 24 port'),
-> (1204306, 100005, 'ADV-48-10F', 'Adv Switch 10GigE Copp/Fiber44 port copp fiber'),
-> (1204307, 100006, 'ENT-24-10F', 'Enterprise Switch 10GigE SFP+ 24 Port'),
-> (1204308, 100007, 'ENT-48-10F', 'Enterprise Switch 10GigE SFP+ 48 port');
Query OK, 4 rows affected (0.05 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql>
```

- d. In the Customers table, perform a query to count all records where the city is Woonsocket and the state is Rhode Island.
- How many records are in the Customers table where the field "city" equals "Woonsocket"? 7 records.

```

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  settings
  customers.csv
  FleetMaintenanceRecords.csv
  FORD
  IntraS-EMPLOYEES.csv
  mysqldatabase.sql
  mysqldatabase.zip
  orders.csv
  qma-orders-data.csv
  README.md
  rma.csv

Terminal x
99112 | Donald | Griffin | 177 East Rocky Clarendon Blvd. | Framingham | Massachusetts | 1781 | 766747-9328 |
99101 | Jesse | Henry | 82 Rocky Oak Avenue | Long Beach | Massachusetts | 17707 | 015-968-2026 |
99399 | Adrian | Bradshaw | 55 Rocky Fabien Street | Santa Ana | Massachusetts | 93389 | 957-468-9588 |
99398 | Rusty | Wood | 83 White Hague Parkway | Fremont | Massachusetts | 53829 | 465-6866297 |
99412 | Samantha | Parrish | 731 East Fabien Boulevard | Madison | Massachusetts | 84488 | 2632707461 |
99426 | Tanisha | Gordon | 39 Fabien Street | Framingham | Massachusetts | 1781 | 968372-8687 |
99439 | Christina | Kire | 253 North Rocky New Road | Des Moines | Massachusetts | 55316 | 968-758-0026 |
99439 | Felix | Fuller | 75 Milton Freeway | Framingham | Massachusetts | 1781 | 157-196-4835 |
99442 | Shelly | Flores | 543 Hague Road | Bakersfield | Massachusetts | 3588 | 542-7107739 |
99478 | Trisha | Cherry | 36 Green Hilton Boulevard | Framingham | Massachusetts | 1781 | 6246514973 |
99559 | Dean | Ballard | 19 South Old Avenue | Baltimore | Massachusetts | 46145 | 835407-1433 |
99571 | Jeremiah | Rodgers | 91 North Hague Street | Detroit | Massachusetts | 99752 | 752-619-8914 |
99616 | Angelina | Trujillo | 98 Rocky Cowley Way | Shreveport | Massachusetts | 37291 | 331-229-4312 |
99676 | Ginger | Hodge | 28 Rocky Nobel Way | Framingham | Massachusetts | 1781 | 212-120-1832 |
99698 | Darius | Harris | 234 Cowley Road | Framingham | Massachusetts | 1781 | 676-4451359 |
99896 | Nicole | Berg | 31 East Second Drive | Framingham | Massachusetts | 1781 | 8374554958 |
99942 | Mandi | Lam | 59 Fabien Road | Wichita | Massachusetts | 47379 | 379884-7841 |
982 rows in set (0.03 sec)

mysql> INSERT INTO Customers (CustomerID, FirstName, LastName, StreetAddress, City, State, ZipCode, Telephone)
-> VALUES
-> (180804, 'Luke', 'Skywalker', '15 Maiden Lane', 'New York', 'NY', '10222', '212-555-1234'),
-> (180805, 'Winston', 'Smith', '123 Sycamore Street', 'Greensboro', 'NC', '27401', '919-555-6623'),
-> (180806, 'MaryAnne', 'Jenkins', '1 Coconut Way', 'Jupiter', 'FL', '33458', '321-555-8987'),
-> (180807, 'Janet', 'Williams', '55 Redondo Beach Blvd', 'Torrance', 'CA', '90501', '310-555-5678');
Query OK, 4 rows affected (0.12 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> INSERT INTO Orders (OrderID, CustomerID, SKU, Description)
-> VALUES
-> (1204305, 180804, 'ADV-24-10C', 'Advanced Switch 10Gig Copper 24 port'),
-> (1204306, 180805, 'ADV-48-10F', 'Adv Switch 10Gig Copp/Fiber44 port copp fiber'),
-> (1204307, 180806, 'ENT-24-10F', 'Enterprise Switch 10Gig SFP+ 24 Port'),
-> (1204308, 180807, 'ENT-48-10F', 'Enterprise Switch 10Gig SFP+ 48 port');
Query OK, 4 rows affected (0.05 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT COUNT(*) AS RecordCount
-> FROM Customers
-> WHERE City = 'Woonsocket' AND State = 'Rhode Island';
+-----+
| RecordCount |
+-----+
| 7 |
+-----+
1 row in set (0.02 sec)

mysql>

```

- e. In the RMA database, update a customer's records.
- Write a SQL statement to select the current fields of status and step for the record in the RMA table with an OrderID value of "5175".
 - What are the current status and step? Status = pending, Step = Awaiting customer Documentation

```

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  mysqldatabase.zip
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  qma-orders-data.csv
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  rma.csv

Terminal x
99559 | Dean | Ballard | 19 South Old Avenue | Baltimore | Massachusetts | 46145 | 835407-1433 |
99571 | Jeremiah | Rodgers | 91 North Hague Street | Detroit | Massachusetts | 99752 | 752-619-8914 |
99616 | Angelina | Trujillo | 98 Rocky Cowley Way | Shreveport | Massachusetts | 37291 | 331-229-4312 |
99676 | Ginger | Hodge | 28 Rocky Nobel Way | Framingham | Massachusetts | 1781 | 212-120-1832 |
99698 | Darius | Harris | 234 Cowley Road | Framingham | Massachusetts | 1781 | 676-4451359 |
99896 | Nicole | Berg | 31 East Second Drive | Framingham | Massachusetts | 1781 | 8374554958 |
99942 | Mandi | Lam | 59 Fabien Road | Wichita | Massachusetts | 47379 | 379884-7841 |
982 rows in set (0.03 sec)

mysql> INSERT INTO Customers (CustomerID, FirstName, LastName, StreetAddress, City, State, ZipCode, Telephone)
-> VALUES
-> (180804, 'Luke', 'Skywalker', '15 Maiden Lane', 'New York', 'NY', '10222', '212-555-1234'),
-> (180805, 'Winston', 'Smith', '123 Sycamore Street', 'Greensboro', 'NC', '27401', '919-555-6623'),
-> (180806, 'MaryAnne', 'Jenkins', '1 Coconut Way', 'Jupiter', 'FL', '33458', '321-555-8987'),
-> (180807, 'Janet', 'Williams', '55 Redondo Beach Blvd', 'Torrance', 'CA', '90501', '310-555-5678');
Query OK, 4 rows affected (0.12 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> INSERT INTO Orders (OrderID, CustomerID, SKU, Description)
-> VALUES
-> (1204305, 180804, 'ADV-24-10C', 'Advanced Switch 10Gig Copper 24 port'),
-> (1204306, 180805, 'ADV-48-10F', 'Adv Switch 10Gig Copp/Fiber44 port copp fiber'),
-> (1204307, 180806, 'ENT-24-10F', 'Enterprise Switch 10Gig SFP+ 24 Port'),
-> (1204308, 180807, 'ENT-48-10F', 'Enterprise Switch 10Gig SFP+ 48 port');
Query OK, 4 rows affected (0.05 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT COUNT(*) AS RecordCount
-> FROM Customers
-> WHERE City = 'Woonsocket' AND State = 'Rhode Island';
+-----+
| RecordCount |
+-----+
| 7 |
+-----+
1 row in set (0.02 sec)

mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
+-----+-----+
| status | step |
+-----+-----+
| Pending | Awaiting customer documentation |
+-----+-----+
1 row in set (0.03 sec)

mysql>

```




ii. Write a SQL statement to update the **status** and **step** for the **OrderID**, 5175 to **status** = "Complete" and **step** = "Credit Customer Account".

1. What are the updated **status** and **step** values for this record? Status = Complete, Step = Credit Customer Account

```
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  mysqlsampledatabase.zip
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-> (1204305, 100004, 'ADV-24-10C', 'Advanced Switch 10GigE Copper 24 port'),
-> (1204306, 100005, 'ADV-48-10F', 'Adv Switch 10GigE Copp/Fiber44 port copp fiber'),
-> (1204307, 100006, 'ENT-24-10F', 'Enterprise Switch 10GigE SFP+ 24 Port'),
-> (1204308, 100007, 'ENT-48-10F', 'Enterprise Switch 10GigE SFP+ 48 port');
Query OK, 4 rows affected (0.05 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT COUNT(*) AS RecordCount
-> FROM Customers
-> WHERE City = 'Woonsocket' AND State = 'Rhode Island';
+-----+
| RecordCount |
+-----+
| 7           |
+-----+
1 row in set (0.02 sec)

mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
+-----+-----+
| status | step |
+-----+-----+
| Pending | Awaiting customer Documentation |
+-----+-----+
1 row in set (0.03 sec)

mysql> UPDATE RMA
-> SET status = 'Complete', step = 'Credit Customer Account'
-> WHERE OrderID = '5175';
Query OK, 1 row affected (0.14 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FROM RMA'
-> WHERE OrderID = '5175' at line 2
mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
+-----+-----+
| status | step |
+-----+-----+
| Complete | Credit Customer Account |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

f. Delete RMA records.

i. Write a SQL statement to delete all records with a reason of "Rejected".

1. How many records were deleted? 596 rows affected.

```
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  mysqlsampledatabase.zip
  orders.csv
  qima-orders-data.csv
  README.md
  rma.csv

Terminal
Query OK, 4 rows affected (0.05 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT COUNT(*) AS RecordCount
-> FROM Customers
-> WHERE City = 'Woonsocket' AND State = 'Rhode Island';
+-----+
| RecordCount |
+-----+
| 7           |
+-----+
1 row in set (0.02 sec)

mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
+-----+-----+
| status | step |
+-----+-----+
| Pending | Awaiting customer Documentation |
+-----+-----+
1 row in set (0.03 sec)

mysql> UPDATE RMA
-> SET status = 'Complete', step = 'Credit Customer Account'
-> WHERE OrderID = '5175';
Query OK, 1 row affected (0.14 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FROM RMA'
-> WHERE OrderID = '5175' at line 2
mysql> SELECT status, step
-> FROM RMA
-> WHERE OrderID = '5175';
+-----+-----+
| status | step |
+-----+-----+
| Complete | Credit Customer Account |
+-----+-----+
1 row in set (0.00 sec)

mysql> DELETE FROM RMA
-> WHERE reason = 'Rejected';
Query OK, 596 rows affected (0.15 sec)

mysql>
```



3. **Update your existing tables** from "Customer" to "Collaborator" using SQL based on this change in requirements. Copy and paste the SQL you write to do the following action:
 - a. Rename all instances of "Customer" to "Collaborator".

```
mysql> DELETE FROM RMA
-> WHERE reason = 'Rejected';
Query OK, 596 rows affected (0.15 sec)

mysql> SELECT TABLE_NAME, CONSTRAINT_NAME, CONSTRAINT_TYPE
-> FROM INFORMATION_SCHEMA.TABLE_CONSTRAINTS
-> WHERE TABLE_SCHEMA = 'QuantigrationUpdates';
+-----+-----+-----+
| TABLE_NAME | CONSTRAINT_NAME | CONSTRAINT_TYPE |
+-----+-----+-----+
| Customers   | PRIMARY         | PRIMARY KEY     |
| Orders      | PRIMARY         | PRIMARY KEY     |
| Orders      | Orders_ibfk_1   | FOREIGN KEY     |
| RMA         | PRIMARY         | PRIMARY KEY     |
| RMA         | RMA_ibfk_1      | FOREIGN KEY     |
+-----+-----+-----+
5 rows in set (0.54 sec)

mysql> RENAME TABLE CUSTOMERS TO Collaborators;
ERROR 1146 (42S02): Table 'QuantigrationUpdates.CUSTOMERS' doesn't exist
mysql> RENAME TABLE Customers TO Collaborators;
Query OK, 0 rows affected (0.28 sec)

mysql> SET foreign_key_checks = 0;
Query OK, 0 rows affected (0.01 sec)

mysql> ALTER TABLE Orders DROP FOREIGN KEY Orders_ibfk_1;
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> ALTER TABLE Collaborators CHANGE COLUMN CustomerID CollaboratorID INT(11) NOT NULL AUTO_INCREMENT;
Query OK, 37998 rows affected, 1 warning (2.62 sec)
Records: 37998 Duplicates: 0 Warnings: 1

mysql> ALTER TABLE Orders CHANGE COLUMN CustomerID CollaboratorID INT(11) NOT NULL AUTO_INCREMENT;
Query OK, 37998 rows affected, 1 warning (3.69 sec)
Records: 37998 Duplicates: 0 Warnings: 1

mysql> ALTER TABLE Orders ADD FOREIGN KEY (collaboratorID) REFERENCES Collaborators(collaboratorID);
Query OK, 0 rows affected (1.50 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> SET foreign_key_checks = 1;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

4. **Create an output file** of the required query results. Write a SQL statement to list the contents of the **Orders** table and send the output to a file that has a CSV extension.

```
mysql> ALTER TABLE Orders ADD FOREIGN KEY (collaboratorID) REFERENCES Collaborators(collaboratorID);
Query OK, 0 rows affected (1.50 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> SET foreign_key_checks = 1;
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT *
-> FROM Orders
-> INTO OUTFILE '/home/codio/workspace/qma-orders-data.csv'
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n';
ERROR 1066 (HY000): File '/home/codio/workspace/qma-orders-data.csv' already exists

mysql> SELECT *
-> FROM Orders
-> INTO OUTFILE '/home/codio/worksparc/orders.csv'
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n';
ERROR 1 (HY000): Can't create/write to file '/home/codio/worksparc/orders.csv' (OS errno 2 - No such file or directory)

mysql> SELECT *
-> FROM Orders
-> INTO OUTFILE '/home/codio/workspace/orders.csv'
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n';
ERROR 1066 (HY000): File '/home/codio/workspace/orders.csv' already exists

mysql> SELECT *
-> FROM Orders
-> INTO OUTFILE '/home/codio/workspace/new-orders.csv'
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'FIELDS TERMINATED BY ',''
mysql> SELECT *
-> FROM Orders
-> INTO OUTFILE '/home/codio/workspace/new-orders.csv'
-> FIELDS TERMINATED BY ','
-> LINES TERMINATED BY '\r\n';
Query OK, 37998 rows affected (0.05 sec)

mysql>
```